BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [X] To Chairmen
(D) [ ] No distribution

Datasheet for the decision of 5 October 2011

Case Number: T 2453/09 - 3.2.04

Application Number: 02755233.0

Publication Number: 1423016

IPC: A22C 13/00

Language of the proceedings: EN

Title of invention:
Collagen casing

Patentee:
Devro Plc

Opponent:
VISCOFAN S.A.

Headword:
-

Relevant legal provisions:
EPC Art. 56

Relevant legal provisions (EPC 1973):
-

Keyword:
"Admissibility of the appeal (yes)"
"Inventive step (no)"

Decisions cited:
T 0062/82, T 0410/87, T 0500/88, T 0074/90, T 0760/08

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 2453/09 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 5 October 2011

Appellant: (Patent Proprietor)
Devro Plc
Moodiesburn
Chryston
Glasgow G69 0JE (GB)

Representative:
Wilson, Gary
Harrison Goddard Foote
Delta House
50 West Nlle Street
Glasgow G1 2NP (GB)

Respondent: (Opponent)
VISCOFAN S.A.
Iturrama, 23
Entreplanta
E-31007 Pamplona (ES)

Representative:
Schön, Christoph
Dr. Schön & Partner
Bavariaring 26
D-80336 München (DE)

Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 15 December 2009 revoking European patent No. 1423016 pursuant to Article 101(3)(b) EPC.

Composition of the Board:

Chairman: M. Ceyte
Members: C. Scheibling
T. Bokor

Summary of Facts and Submissions

I. By its decision dated 15 December 2009 the Opposition Division revoked the European patent 1 423 016. On 24 December 2009 the Appellant (patentee) filed an appeal and paid the appeal fee simultaneously. The statement setting out the grounds of appeal was received on 23 April 2010.

II. The Opposition division considered that claim 1 as granted was not new with respect to D2 and that the auxiliary requests submitted during the oral proceedings were not admissible.

III. The following documents played a role in the present proceedings:

D1: ES-A-2 017 564 and its translation into English
D2: GB-A-2 359 241
D3: CN-C-1 045 364
D12: US-A-4 196 223
D50: JP-A-6-46741 and its translation into English.

IV. Oral proceedings took place on 5 October 2011 before the Board of Appeal.

The Appellant requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of the claims of the main request, in the alternative that the patent be maintained on the basis of the claims of one of the auxiliary requests 1 or 2, all filed with letter dated 19 August 2011.

He mainly argued as follows:
It is normal procedure to add limiting features to the claims to overcome an objection of lack of novelty or inventive step. This cannot render the appeal inadmissible.
Prior to the invention it was considered that casings made of porcine collagen do not exhibit the necessary strength to be used as empty casings on a production line, where the empty casings are stuffed with meat under pressure. Especially D50 does not teach that a specific collagen to fat ratio results in an increased casing strength. In fact D50 does not even clearly disclose making casings consisting essentially of porcine collagen.
Therefore, the skilled person would not have relied on D50 for providing a porcine collagen casing of improved strength.

The Respondent (opponent) mainly submitted that the appeal is not admissible because the independent claims now comprise features which were not discussed before the first instance. Novelty is no longer challenged. However the subject-matter of claim 1 of all requests lacks an inventive step with respect to D50 when taking into account the common general knowledge of the skilled person. The skilled person would have taken D50 into consideration, because it clearly relates to improving the cooking properties of sausages comprising a casing made of porcine collagen.

The Respondent requested that the appeal be rejected as inadmissible, alternatively that it be dismissed.

V. Claim 1 of the main request reads as follows:

"1. An extruded tubular sausage casing made from an extrudable gel extruded through an annular die; the casing, on a dry weight basis, comprising collagen, fat, and a humectant, and wherein the collagen content of the casing consists essentially of porcine collagen and the fat content of the casing is below that of natural porcine skin or hide and the ratio of collagen to fat is at least 3 to 1 and the cold wet tensile strength of the casing in the longitudinal direction is at least 2.5kg."

Claim 1 of auxiliary request 1 reads as follows:

"1. An extruded tubular sausage casing made from an extrudable gel extruded through an annular die forming an extruded material having a wet thickness in the range of 0.2 to 2 mm; the casing, on a dry weight basis, comprising collagen, fat, and a humectant, and wherein the collagen content of the casing consists essentially of porcine collagen and the fat content of the casing is below that of natural porcine skin or hide and the ratio of collagen to fat is at least 3 to 1 and the cold wet tensile strength of the casing in the longitudinal direction is at least 2.5kg and wherein the collagen content of the casing is free of bovine collagen."

Claim 1 of auxiliary request 2 reads as follows:

"1. A pork sausage having a porcine collagen casing wherein the ratio of collagen to fat is at least 3 to 1 and the fat content of the casing is below that of

natural porcine skin or hide, and the casing made from an extrudable gel is extruded through an annular die forming an extruded material having a wet thickness in the range of 0.2 to 2 mm; the casing, on a weight basis, comprising collagen, fat, and a humectant and wherein the cold wet tensile strength of the casing in the longitudinal direction is at least 2.5 kg and wherein the collagen content of the casing is free of bovine collagen."

Reasons for the Decision

1. *Admissibility of the appeal*

The Respondent submitted that the appeal is not admissible because the independent claims of all requests now include features which were not discussed during the opposition proceedings. The purpose of the appeal proceedings is however not to give a party the right to have a new case considered, i.e. which is not related to the decision under appeal.

The Board is unable to follow such reasoning: It is established case law (see e.g. recent T 0760/08) that an appeal can be based on new amended claims in so far as the amendments are intended to address the grounds of the impugned decision.

In claim 1 of the new main request filed together with the grounds of appeal, the Appellant has introduced further limiting features and submitted the reasons why such amended subject-matter was inter alia novel over the prior art citations. Thus the amendments made clearly address the grounds of the impugned decision. The appeal is therefore admissible.

2. *Preliminary remarks*

2.1 The patentee has confirmed that a casing produced by extruding a gel consisting essentially of porcine collagen, fat and an humectant through an annular die and which exhibits a ratio of collagen to fat of at least 3 to 1 would necessarily have a cold wet tensile strength in the longitudinal direction of at least 2.5 kg. The claimed tensile strength is thus an inherent characteristic of a casing produced as set out above.

2.2 The Appellant stated that claim 1 of auxiliary requests 1 and 2 has been amended with respect to claim 1 of the main request in order to overcome objections based on Articles 84 and 123(2) EPC, so that any conclusion regarding inventive step concerning claim 1 of the main request likewise applies to claim 1 of the auxiliary requests 1 and 2.

3. *Inventive step*

3.1 The Appellant argued that the invention overcomes a prejudice against using porcine collagen for making empty sausage casings.

3.2 The Board is unable to follow this submission: The wording of claim 1 of the main request does not specify that the extruded tubular sausage casing does not comprise any filling material. Thus the claimed extruded tubular sausage casing is not necessarily "empty". Furthermore, according to the well established jurisprudence of the Boards of appeal, the existence of

a prejudice cannot be based on a statement in one patent document and/or statements from one or two experts. In order to demonstrate the existence of a prejudice it must rather be shown that said opinion was the prevailing opinion in this technical field (see inter alia T 0062/82; T 0410/87; T 0500/88 and T 0074/90). This, however, is clearly not the case here as shown by the prior art citations D1, D2, D3, D12 and D50 which relate to the use of porcine collagen for making sausage casings.

3.3 D50 (translation) which is considered to be the closest prior art, discloses an extruded tubular sausage casing (abstract, page 1) made from an extrudable gel extruded through an annular die (page 2, first line); the casing, on a dry weight basis, comprising collagen, fat (claim 2), and a humectant (page 2, line 4), and wherein the collagen content of the casing consists essentially of porcine collagen (paragraphs [0004] and [0007]).

Although D50 does not explicitly disclose a collagen to fat ratio it is stated, page 3, lines 2 and 3 of paragraph [0012] "The present invention preferably uses collagen having fat content of 5% or less with respect to the dried weight of the collagen" and page 4, lines 1 to 3 of paragraph [0014] "The edible fat as described above is added to the collagen solution at a rate of 2 to 30% by weight, preferably 5 to 20% by weight, with respect to the dried weight of the collagen".
This means that the starting material comprises a collagen to fat ratio of 100 to 5 and that 30% preferably 20% of edible fat are added which results in

a collagen to fat ratio of 100 to 35 preferably 100 to 25, i.e. 2.86 to 1 preferably 4 to 1.
It is therefore obvious that a skilled person would also consider carrying out the invention of D50 in the preferred range, i.e. with a collagen to fat ratio of 4 to 1.
Thus at least in the preferred composition (with a ratio of 4 to 1) the required tensile strength is also attained, since it directly results from the fact that the casing has been extruded through an annular die and has a collagen to fat ratio of at least 3 to 1 (see also point 2.1 above).
Since the fat content of natural porcine skin or hide is comprised between 1 to 1 and 1.5 to 1 (patent specification, paragraph [0012]) the fat content of a casing according to D50 is also below that of natural porcine skin or hide.

The Appellant referred to paragraphs [0004] and [0007] of D50 and submitted that there was no clear and unambiguous teaching that the pig skin alone can be used. The relevant parts of the paragraphs are as follows: "As collagen is extracted and produced from natural raw materials such as cattle skin and pig skin …" and "As such, if cattle skin or pig skin having high fat content is used as a material of collagen…" He also contended that the use of "a" instead of "the" in the expression "used as a material" rather indicates that a mixture of cattle and pig skin is envisaged.
This cannot be accepted. First of all the document in question is a translation so that no particular meaning can be inferred from the use of the indefinite article "a" rather than the definite article "the".

Bearing in mind that the skilled person is aware that collagen casings made exclusively of porcine collagen are admittedly state of the art (even if not used as empty casings), he will understand that the raw material to which D50 refers can be made of cattle skin alone or of pig skin alone or even be a mixture of cattle skin and pig skin.
Thus, the use of pig skin alone as raw material is one of the alternatives disclosed by D50.

The Appellant also considered that the problem to be solved by the invention was "to find a better or alternative sausage casing of good cooking properties and having sufficient tensile strength to withstand the stress of a production line for empty casings and also the stress of stuffing with sausage meat under pressure".
He concludes that the skilled person would not have considered D50 because it is unclear whether the casings of D50 would be suitable for the intended use.
However, as has been indicated, the wording of claim 1 of the main request does not specify that the extracted tubular sausage casing does not comprise any filling material. In particular paragraph [0007] of D50 states the following:
"As such if the cattle skin or pig skin having a high fat content is used as a material for collagen … the heat cooking property will be improved. However in the case of using those having high fat content to remain in collagen at a high level, although the heat cooking property is improved, **other quality performances such as preservative property and stability of quality would be deteriorated**" (emphasis added).

Thus D50 clearly teaches that the fat content in collagen should be high enough in order to achieve good heating properties but not too high so as to avoid a deterioration of the "other quality performances". Thus the skilled person would hold the strength properties among these "other quality performances". Therefore, this citation teaches how to optimise the fat content in collagen in such a way as to reach an acceptable compromise between the cooking and inter alia the strength properties.
Moreover, since, as admitted by the patentee, the tensile strength directly results from the fact that the casing has been extruded through an annular die and has a collagen to fat ratio of at least 3 to 1, the casing of D50 would additionally also exhibit a sufficient tensile strength and thus also solve the remaining part of the problem addressed by the invention.

The Board concludes that the subject-matter of claim 1 according to the main request does not involve an inventive step.

3.4 Claim 1 of auxiliary request 1 adds that the extruded material has a wet thickness in the range of 0.2 to 2 mm and that the casing is free of bovine collagen.
Claim 1 of auxiliary request 2 relates to a pork sausage having a casing as defined in claim 1 of auxiliary request 1.

That the casing is free of bovine collagen is one of the alternatives disclosed in D50. The thickness range of 0.2 to 2 mm is standard thickness range for sausage casings and the use of such a casing for producing a

pork sausage lies within the normal capability of the skilled person, so that these additional measures cannot make an inventive contribution to the claimed subject-matter. This has not been contested by the Appellant.

Consequently the subject-matter of claim 1 of the auxiliary requests 1 and 2 does not involve an inventive step either.

Order

For these reasons it is decided that:

The appeal is dismissed

The registrar: The Chairman:

D. Hampe M. Ceyte